Fax sent by : 3127048023 TREXLER, ETAL. 06-02-06 14:55 Pg: 5/

BEST AVAILABLE COPT

Amendments to the Claims:

1. (Currently Amended) A method of processing Voice band Data in a communication path in a telecommunication network, said communication path consisting of a plurality of Voice band Data relay gateways, each being capable of encoding and decoding Voice band Data, including a first Voice band Data relay gateway, a last Voice band Data relay gateway, and at least one voice band dat Data relay gateway between the first and last Voice band Data relay gateways, said method comprising:

detecting the at least one Voice band Data relay gateway between the first and last

Voice band Data relay gateways; and disabling the encoding and decoding capability of the at
least one Voice band Data relay gateway between the first and last Voice band Data relay
gateways, whereby the at least one Voice band Data relay gateway between the first and last

Voice band Data relay gateways does not encode and decode the Voice band Data; despite being
capable of doing so if not disabled, wherein only the first and last Voice band Data relay
gateways are enabled and perform encoding and decoding of the Voice band Data; and after
detecting and disabling the encoding and decoding capability of the at least one Voice band Data
relay gateway between the first and last Voice band Data relay gateways, transmitting the Voice
band Data from the first to the last Voice band Data relay gateway.

2. (Original) A method as recited in claim 1, further comprising using said first and last Voice band Data relay gateways to encode and decode the Voice band Data.

Serial No. 10/080,219

Art Unit: 2664

Fax sent by : 3127048023 TREXLER, ETAL. 06-02-06 14:55 Pg: 6/17

3. (Original) A method as recited in claim 1, further comprising disabling all of the Voice

band Data relay gateways between the first and last Voice band Data relay gateways in the

communication path, whereby the Voice band Data relay gateways between the first and last

Voice band Data relay gateways do not encode and decode the Voice band Data.

4. (Original) A method as recited in claim 1, further comprising initiating a probing

sequence to detect the presence of Voice band Data.

(Original) A method as recited in claim 1, wherein the communication network includes

a calling terminal and an answerer terminal, and the method provides that a probing sequence is

initiated by the calling terminal to detect the presence of a Voice band Data relay.

6. (Original) A method as recited in claim 5, further comprising initiating the probing

sequence via Non-standard facilities using the calling terminal.

7. (Original) A method as recited in claim 1, wherein the telecommunication network is

configured to provide communication in a pre-determined protocol, and the protocol includes a

non-standard information field following standard fields in each Call Menu signal and Joint

Menu signal sequence to define information beyond what is defined in the protocol, said method

further comprising having a gateway receive a Call Menu signal which contains standard fields,

Serial No. 10/080,219

Art Unit: 2664

Fax sent by : 3127048023 TREXLER, ETAL. 06-02-06 14:56 Pq: 7/17

and transmit a Joint Menu signal with information relating to the presence and capability of the

Joint Menu signal contained in the non-standard information field.

8. (Original) A method as recited in claim 7, wherein the protocol is V.8.

(Original) A method as recited in claim 1, further comprising modulating an answer tone 9.

with a signature pattern at a pre-determined frequency.

(Original) A method as recited in claim 9, further comprising modulating the answer tone 10.

such that the modulation is minimally intrusive to network echo cancellers, which use the

answering tone as a means to get disabled, when the tone is detected in either direction in the

communication path.

11. (Original) A method as recited in claim 10, wherein the communication network includes

a calling terminal and an answerer terminal, further comprising providing that the gateway which

detects the modulated answer tone actively mutes signals from the calling terminal toward the

answerer terminal.

12. (Original) A method as recited in claim 11, further comprising providing that upon

detection of the calling tone, a gateway sends a reply tone to a gateway transmitting the

modulated tone.

Serial No. 10/080,219

Art Unit: 2664

Fax sent by : 3127048023 TREXLER, ETAL. 06-02-06 14:56 Pg: 8/17

13. (Currently Amended) A method as recited in claim 12, wherein the reply signal is a

single tone at a pre-determined frequency for a pre-determined time internal interval.

14. (Original) A method as recited in claim 13, wherein the time interval does not exceed

100ms.

15. (Original) A method as recited in claim 12, wherein the reply signal consists of the 1800

Hz tone in addition to another signal with lower amplitude.

16. (Original) A method as recited in claim 1, further comprising having the gateways

achieve a common link rate during modern training.

17. (Original) A method as recited in claim 16, further comprising having a gateway retrain

at a lower rate in order to achieve a common link rate along the communication path.

18. (Original) A method as recited in claim 1, further comprising padding the data to allow

transmission into a higher speed link rate.

19. (Original) A method as recited in claim 1, further comprising scrambling demodulated

data in one direction and descrambling the data in an opposite direction, in order to insure that

network echo cancellers remain disabled.

Serial No. 10/080,219

Art Unit: 2664

mi Omi. 2

Fax sent by : 3127048023

(Original) A method as recited in claim 1, further comprising transmitting a fixed non-20. scrambled pattern along the communication path followed by a fixed length message containing a command.

Serial No. 10/080,219

Art Unit: 2664